***CRUD C# MONGODB***

* First : install MongoDB.Driver 🡪 using MongoDB.Driver
* Second :

**Ở hàm Class:**

string connectionString = "mongodb://localhost:27017";

var client = new MongoClient( connectionString );

**// Connect to database and collection**

var **database** = client.GetDatabase("YourDatabaseName");

* Nó sẽ tự tạo 1 folder đặt tên trong MongoDB : YourDatabaseName

var **studentCollection** = **database**.GetCollection<Student>("Students");

* Lấy ra 1 collection có tên **“Students”** 🡪 nếu không có là nó sẽ tự tạo 1 Folder chứa nhiều thông tin

**// create 5 students**

var students = new List<Student>

{

new Student("Minh", "minhvip@gmail.com", "0933333")

{

Subjects = new List<string> { "Math", "Physics", "Chemistry" }

},

new Student("Tuan", "tuan@gmail.com", "0911444")

{

Subjects = new List<string> { "English", "History" }

},

new Student("Lan", "lan123@gmail.com", "0912121")

{

Subjects = new List<string> { "Biology", "Chemistry", "Math" }

},

new Student("Hoa", "hoa456@gmail.com", "0945454")

{

Subjects = new List<string> { "Physics", "Computer Science" }

},

new Student("Duc", "duc789@gmail.com", "0987878")

{

Subjects = new List<string> { "English", "Math", "Art" }

}

};

**Console.WriteLine("----Added into MongoDB----");**

**// Thêm vào MongoDB**

//studentCollection.InsertMany(students); 🡪 **đã chạy rồi thì sau đó cmt lại, kẻo bị double data**

//Console.WriteLine("All Students added");

Console.WriteLine("--------Read data from Database---------------");

**// Read data**

var allStudents = studentCollection.Find(student => true ).ToList();

Console.WriteLine("All Students: ");

foreach ( var student in allStudents ) {

student.DisplayInfor();

}

Console.WriteLine("---------Search name in database-----------------");

**// Search Student by Name**

var studentName = "Duc";

var findStudent = studentCollection.Find( s => s.Name == studentName).FirstOrDefault();

if (findStudent != null)

{

findStudent.DisplayInfor();

}

else {

Console.WriteLine("This student not found");

}

**// Update data**

Console.WriteLine("---------Update data in database-----------------");

// Find student need to update

var filterUpdateSubject = Builders<Student>.Filter.Eq( s => s.Name , "Tuan" );

// Update any Subject // change 1 môn học luôn

var updateSpecificSubject = Builders<Student>.Update.Set(s => s.Subjects[0], "Sleeping");

studentCollection.UpdateOne( filterUpdateSubject, updateSpecificSubject);

Console.WriteLine("Subject changed successfully ");

**// Update Phone Number**

var filterUpdate = Builders<Student>.Filter.Eq(s => s.Name, "Minh");

var updatePhone = Builders<Student>.Update.Set(s => s.PhoneNumber, "01111111");

studentCollection.UpdateOne(filterUpdate, updatePhone);

Console.WriteLine("Phone number updated for Minh");

**// Delete data**

Console.WriteLine("---------Delete data in database-----------------");

**// Delete theo Name**

var deleteFilter = Builders<Student>.Filter.Eq(s => s.Name, "nguyen");

studentCollection.DeleteOne(deleteFilter);

Console.WriteLine("Student Minh Deleted");